

SONY®

4-482-350-41 (1)

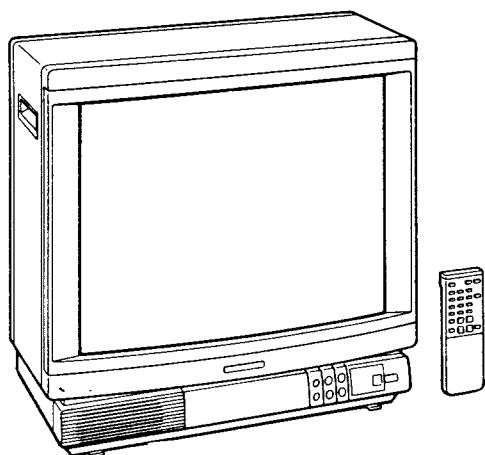
CABLE COMPATIBLE TV

KV2094R

TRINITRON® COLOR TV

OPERATING INSTRUCTIONS

Before operating the unit, please read this manual thoroughly and retain it for future reference.



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OWNER'S RECORD

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

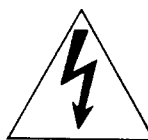
Model No. _____ Serial No. _____

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WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

PRECAUTIONS

Safety

- Operate the unit only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If the plug does not fit into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not going to be used for several days. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Installation

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the unit in a hot or humid place or in a place subject to excessive dust or mechanical vibration.

Cleaning

Clean the unit with a slightly damp soft cloth and a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the cabinet.

Repacking

Retain the original carton and packing materials for safe transport of this unit in the future.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

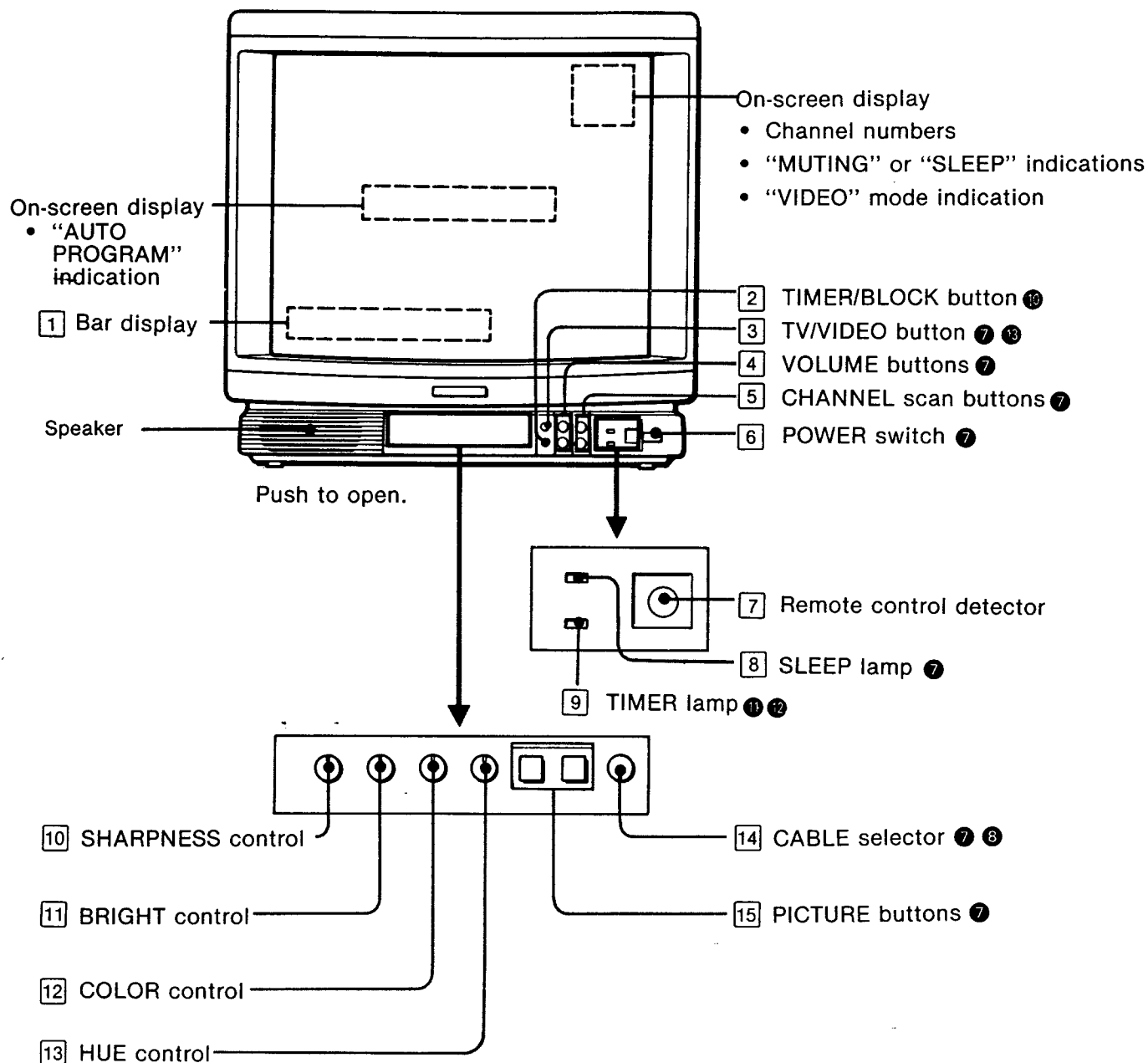
FEATURES

- **New Microblack™ Trinitron picture tube** for high resolution and high contrast picture.
- **Multi-band VHF/UHF/CATV tuner** receives up to 125 cable channels for a total of 181 possible off-air and cable channels.
- **Automatic programming** enables presetting of all receivable channels with a press of a button.
- **Timer/Block** for automatic program starting and channel blocking.
- **Sleep timer** automatically turns off the TV after approximately one hour.
- **MPX OUT** jack to which an optional special adaptor is connected for multichannel TV sound (MTS) broadcasts, stereo or bilingual.
- **Remote Commander** for convenient operation.
- **Built-in video input jacks** allow direct hook-up to a VCR.
- **On-screen display**
- **Jump button** enables to switch quickly between two channels.
- **Dynamic Color™ system** for superior color reproduction with natural facial color tones and dazzling whites.
- **Dynamic Picture™ system** adjusts picture contrast automatically to produce more detail in both bright and dark areas of every scene.
- **Colorpure Filter™** produces fine picture detail without color spill or color noise.

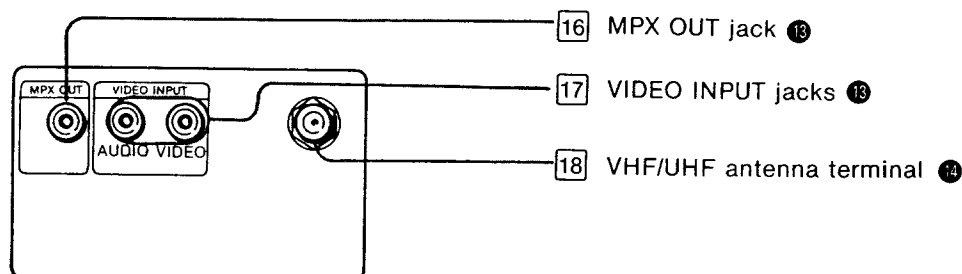
LOCATION AND FUNCTION OF CONTROLS

Refer to the page indicated in ● for details.

Front



Rear



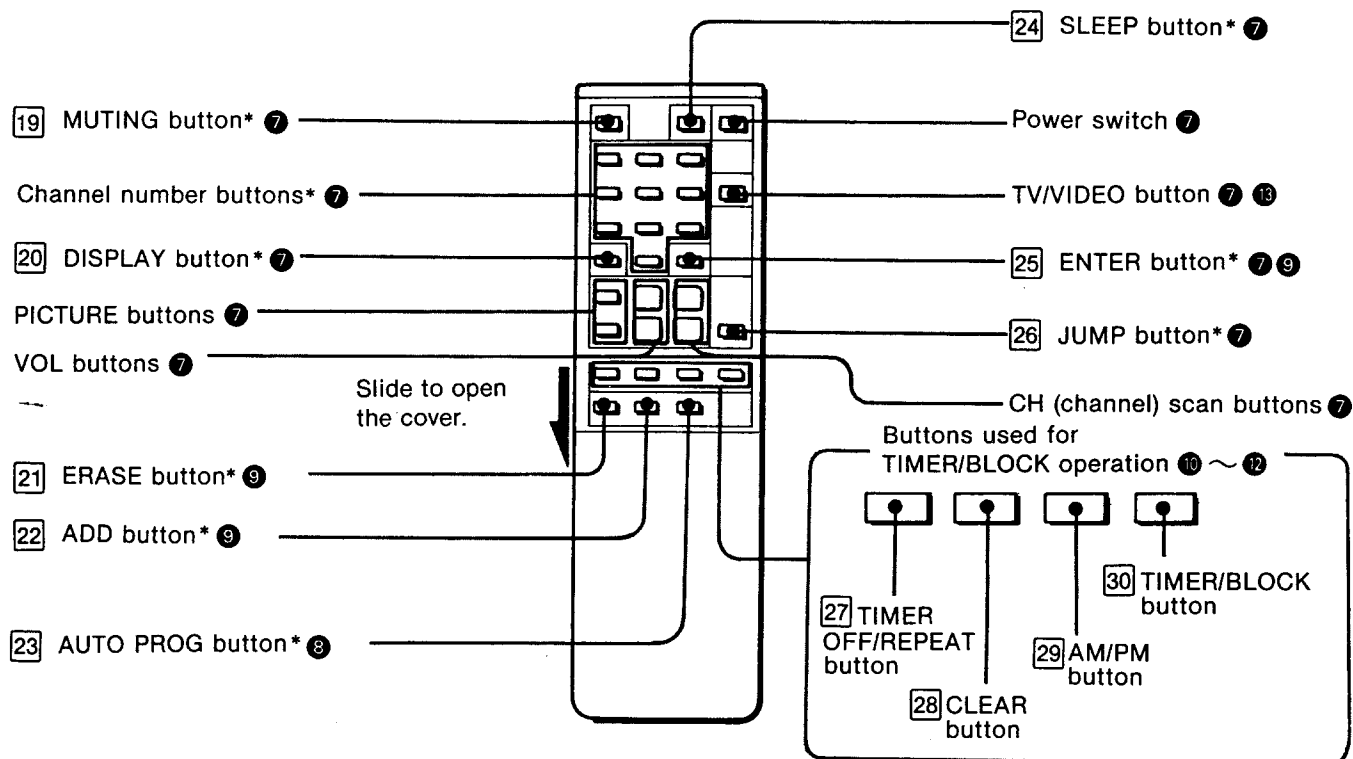
Front

- 1 Bar display**
Indicates picture or sound level setting.
- 2 TIMER/BLOCK button**
Used for Timer/Block operation. Press to change the "pages."
- 3 TV/VIDEO button**
Press to view the picture coming in through the VIDEO INPUT jacks on the rear panel. Press again to return to the TV mode.
- 4 VOLUME buttons**
Press "+" to increase volume or "-" to decrease it.
- 5 CHANNEL scan buttons**
Press "+" for higher-numbered channels or "-" for lower-numbered channels.
- 6 POWER switch**
Press to turn the unit on. Press again to turn the unit off.
- 7 Remote control detector**
Point the Remote Commander towards this detector.
- 8 SLEEP lamp**
Lights up when the SLEEP button on the Remote Commander is pressed.
- 9 TIMER lamp**
Lights up to indicate that the program start timer has been set.
- 10 SHARPNESS control**
Turn clockwise for more sharpness or counterclockwise for less.
- 11 BRIGHT (brightness) control**
Turn clockwise for more brightness or counterclockwise for less.
- 12 COLOR control**
Turn clockwise for more color intensity or counterclockwise for less.
- 13 HUE control**
Turn clockwise to make the tones greenish or counterclockwise to make them purplish.
- 14 CABLE selector**
Set to ON to view cable TV programs. Set to OFF to view VHF or UHF programs.
- 15 PICTURE buttons**
Press "+" to increase picture contrast or "-" to decrease it.

Rear

- 16 MPX OUT jack**
Connect an optional special adaptor for multichannel TV sound broadcasts, stereo or bilingual.
- 17 VIDEO INPUT (VIDEO/AUDIO) jacks**
Connect a VCR, etc.
- 18 VHF/UHF antenna terminal**
Connect the supplied indoor antenna or an optional external antenna.

Remote Commander RM-744



*The functions of these buttons are not available on the TV.

19 Muting button
Press to mute the sound immediately. Press again to restore the sound.

20 DISPLAY button
Press to keep the display on the screen.

21 ERASE button
Press to erase channels.

22 ADD button
Press to add channels.

23 AUTO PROG (automatic programming) button
Press to start automatic programming.

24 SLEEP button
Press to activate the sleep timer.

25 ENTER button
Press after pressing the numerals to select channels.

26 JUMP button
Press to recall the channel which was displayed directly before the one being tuned in.

27 TIMER OFF/REPEAT button
Used to deactivate or reactivate the program start TIMER.

28 CLEAR button
Used to erase the time and channel number from the unit's memory.

29 AM/PM button
Each time this button is pressed, the "AM" and "PM" indications will appear alternately on the screen.

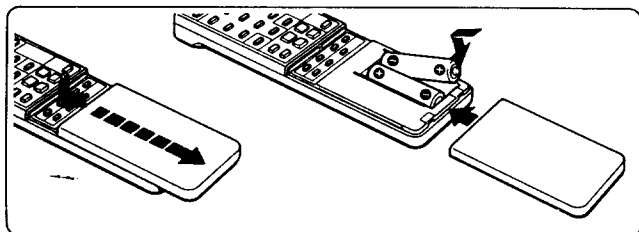
30 TIMER/BLOCK button
Used to change the "pages." This button and the TIMER/BLOCK button on the TV are operated in the same way.

OPERATION

Normally the Remote Commander is all that is needed to operate the TV in everyday use.

Battery installation

- 1 Slide the cover all the way so that the battery compartment appears, then take it off.
- 2 Place batteries in the Commander with correct polarity as illustrated inside the case.
- 3 Replace the cover.



Notes

- Use 2 size AA (R6) batteries.
- In normal operation, batteries will last up to half a year.
If the unit does not operate properly, the batteries might be exhausted. Replace them with new ones.
- To avoid damage from possible battery leakage, remove the batteries whenever they are not in use for an extended period of time.
- Be sure that there are no obstructions between the Commander and the TV.
- Operable range is limited.

If a Remote Commander that is not recommended is used to operate this TV, or if the supplied Remote Commander is used to operate another TV, the TV may not operate properly.

- 1 Press **POWER** to turn on the TV.
The channel number will be displayed on the screen and the **SLEEP** lamp will light up for several seconds.
 - 2 Set the **CABLE** selector to:
OFF for VHF and UHF programs.
ON for cable TV programs.
 - 3 If the "VIDEO" indication is displayed, press the **TV/VIDEO** button so that it goes off.
 - 4 Select channels in one of the following two ways.
 - Press the numeral(s) of the channel and then press **ENTER** on the Remote Commander.
e.g. To select channel 6, press 6 and then **ENTER**.
To select channel 125, press 1, 2, 5 and then **ENTER**.
If you pressed a wrong numeral, wait for a few seconds and it will disappear. Then try again.
 - Press **CH "+"** or **CH "-"**. Preset channels will appear in sequence. (For presetting desired channels, see "PRESETTING CHANNELS.")
- The channel display will remain on the screen for a few seconds. To keep the display on the screen, press **DISPLAY**.
- 5 Adjust volume and picture, if necessary.
Press **VOL "+"** or **VOL "-"** to adjust the volume and **PICTURE "+"** or **PICTURE "-"** to adjust the picture.

To switch quickly between 2 channels, press JUMP. Each time **JUMP** is pressed, the channel which appeared on the screen directly before is recalled. This button enables you to keep track of two programs alternately.

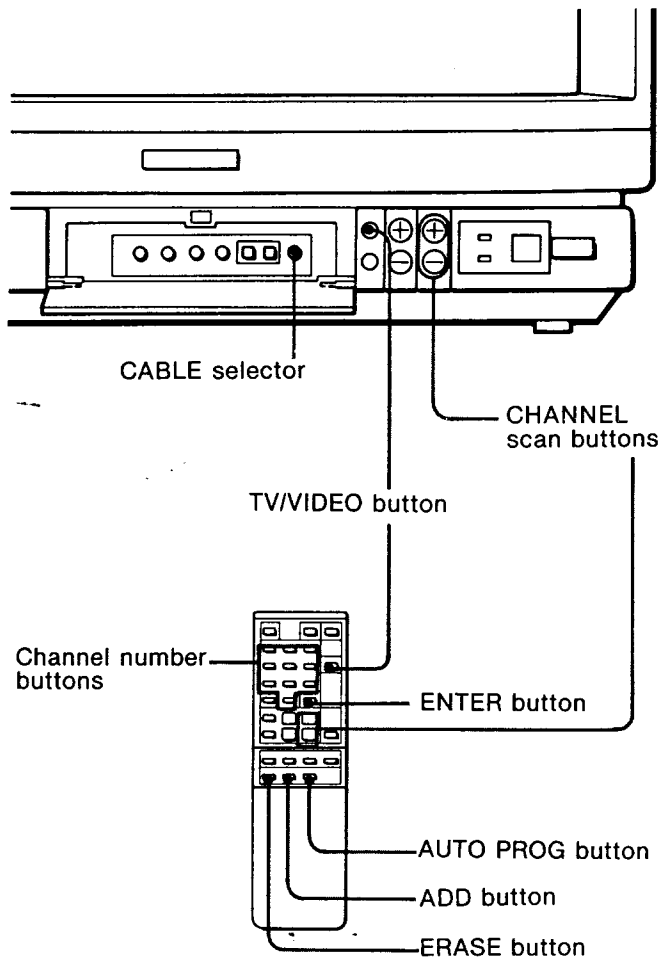
To mute the sound, press MUTE. The "MUTE" indication will appear on the screen. To restore the sound, press **MUTE** again or **VOL +/-**.

To turn off the unit, press POWER again.

To have the TV turn off automatically after approximately 1 hour, press SLEEP. The **SLEEP** indication will appear on the screen for a few seconds and the **SLEEP** lamp on the TV will remain lit until the TV is turned off. To cancel the **SLEEP** timer, press **SLEEP** again so that the **SLEEP** lamp goes out, or turn off the TV.

PRESETTING CHANNELS

Use the supplied Remote Commander.



Receivable channels of this unit are:

VHF: 2— 13
UHF: 14— 69
Cable: 1—125

Both automatic and manual programming are available. Automatic programming presets all the receivable channels automatically.

With manual programming, you can preset only the desired channels.

After the presetting has been completed, only the preset channels appear, in numerical sequence, when CH (CHANNEL) +/- are pressed.

PREPARATION

- 1 Turn on TV.
- 2 If the "VIDEO" indication is displayed, press the TV/VIDEO button so that it goes off.
- 3 Set the CABLE selector to:
ON for cable TV programs.
OFF for VHF and UHF programs.

AUTOMATIC PROGRAMMING

Automatic programming presets receivable channels automatically.

Press AUTO PROG.

"AUTO PROGRAM" is displayed on the screen and receivable channels (other than the channels already preset) will be preset in numerical sequence. The channels previously preset remain in the unit's memory.

When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

Note

Some channels may not be preset or some unnecessary channels may be preset due to the signal strength. To add channels that cannot be preset with automatic programming, or to erase unnecessary channels, follow the steps in "MANUAL PROGRAMMING."

CABLE TV CHANNEL CHART**

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to this chart.

Check with your local cable TV company for more complete information on the available channels.

Number on this TV		1	5	6	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Corresponding CATV channel		A-8	A-7	A-6	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
31	32	33	34	35	36	37	38	39		93	94	95	96	97	98	99	100	101	102		123
R	S	T	U	V	W	W+1	W+2	W+3		W+57	W+58	A-5	A-4	A-3	A-2	A-1	W+59	W+60	W+61		W+82
																					W+83
																					W+84

** The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

Note

Pay cable TV systems use scrambled or encoded signals and require special converters (decoders) in addition to the normal cable connection.

MANUAL PROGRAMMING

Adding channels

- 1 Select the channel to be added by pressing the channel number buttons and then ENTER.
- 2 Press ADD on the Remote Commander.
" + " will appear on the left of the channel display on the screen, indicating that the channel has been added.

Repeat steps 1 and 2 to add other channels.

Erasing channels

- 1 Select the channel to be erased.
- 2 Press ERASE on the Remote Commander.
" - " will appear on the left of the channel display on the screen, indicating that the channel has been erased.

Repeat steps 1 and 2 to erase the other channels.

Note

You cannot erase a VHF or UHF channel from the unit's memory and retain the cable TV channel which has the same number, or vice versa. If either a VHF/UHF channel or a cable TV channel with the same number is to be kept in the memory, do not erase the number.

TIMER/BLOCK

FUNCTIONS

Internal clock	Once the internal clock is set, the current time will appear on the screen. It is necessary to set the clock correctly to activate the program start TIMER and channel BLOCK.
Program start TIMER	Makes a program of your choice appear on the screen automatically at the time desired.
Channel BLOCK	Blocks a channel from appearing on the screen for 12 hours. Use channel BLOCK to prevent children from watching undesirable programs.

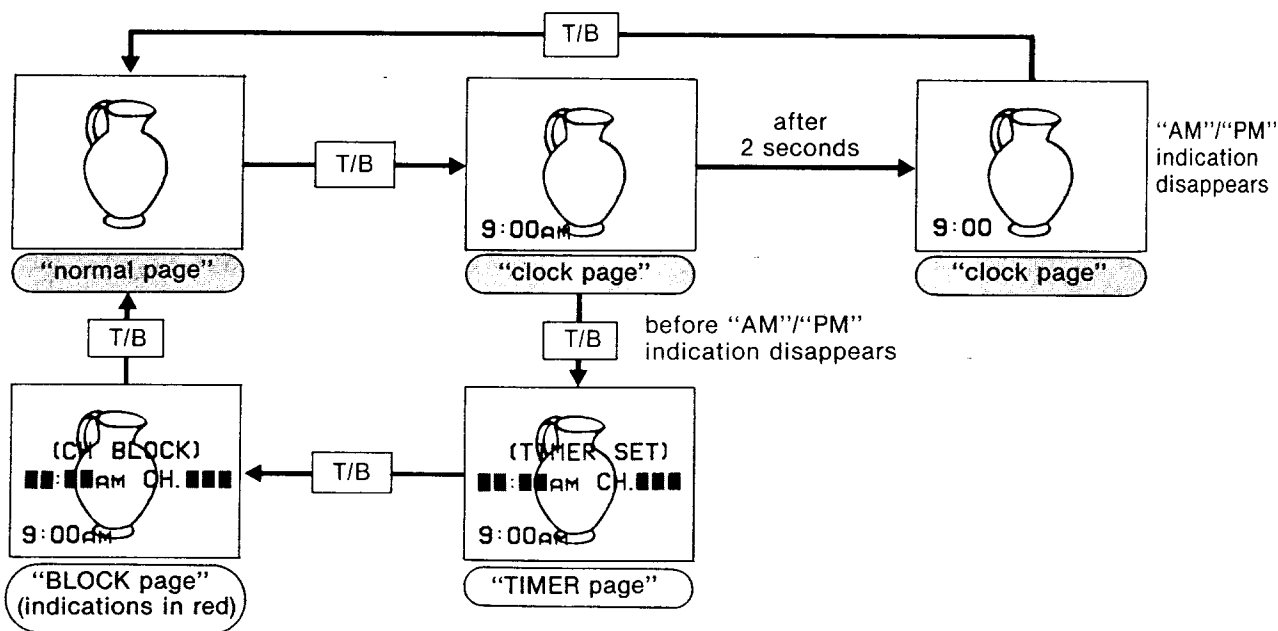
The buttons used for the above functions are located on the Remote Commander.

Notes

- All settings will be erased from the unit's memory if the unit is unplugged, or if a power failure occurs.
- The TIMER and BLOCK will operate only if the clock is set correctly.
- If the TIMER and BLOCK are set for overlapping times on the same channel, the blocked channel will appear on the screen at the time set on the TIMER.

To set the internal clock, program start TIMER and channel BLOCK, you must summon the corresponding "pages": "clock page," "TIMER page" and "BLOCK page."

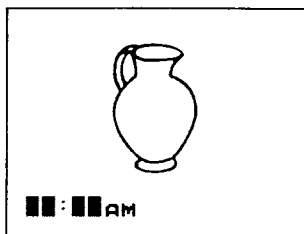
To change the "pages," press TIMER/BLOCK. T/B stands for "Press the TIMER/BLOCK button."



HOW TO SET THE INTERNAL CLOCK

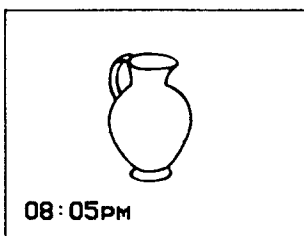
Example: To set the clock to 8:05 PM

- 1 Press TIMER/BLOCK once to change from "normal page" to "clock page."

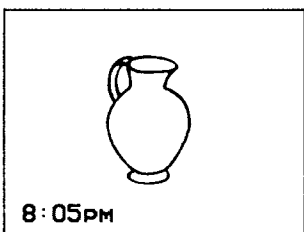


"clock page"

- 2 Press 0, 8, 0, 5, AM/PM (0 necessary).



- 3 If you have performed the operation correctly, press ENTER. The numbers will "wink" to indicate that the clock has been set. (The 0 in front will disappear.)



If you have made a mistake, press CLEAR and return to step 2.
The "AM"/"PM" indication will disappear after 2 seconds.

- To summon "TIMER page," press TIMER/BLOCK before the "AM"/"PM" indication disappears. To return to "normal page," press TIMER/BLOCK after the "AM"/"PM" indication has disappeared.
- To reset the clock, summon "clock page" and press CLEAR before the "AM"/"PM" indication disappears. Then follow the steps above from step 2.

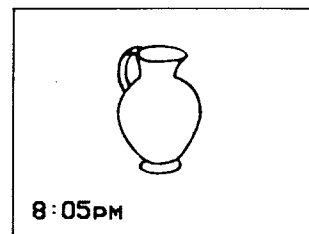
12:00 AM stands for midnight.
12:00 PM stands for noon.

HOW TO SET THE PROGRAM START TIMER

Make sure that the clock has been set correctly before setting the program start TIMER.

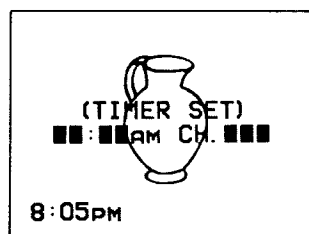
Example: To set the TIMER for a program which begins at 10:30 PM on channel 12

- 1 Press TIMER/BLOCK once to change from "normal page" to "clock page."



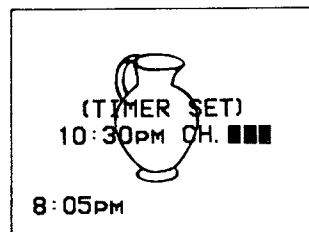
"clock page"

- 2 Press TIMER/BLOCK before the "AM"/"PM" indication disappears and summon "TIMER page."

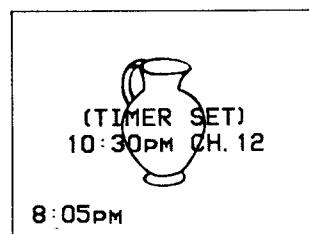


"TIMER page"

- 3 Press 1, 0, 3, 0, AM/PM, ENTER. Numbers will "wink" to indicate that the time has been set.



- 4 Press 1, 2, ENTER (0 not necessary). Numbers will "wink" to indicate that the channel has been set.



The TIMER lamp will light up to indicate that the TIMER has been set.

If you have made a mistake, press CLEAR and return to step 3.

HOW TO SET THE CHANNEL BLOCK

At the preset time, the selected channel will appear on the screen and the TIMER lamp will go out. The TIMER will operate whether you are watching a TV program or a VCR playback, or even if you have turned off the TV. If no button is pressed within 2 hours after the preset time, an "OFF" indication will appear on the screen for 1 minute.

If a button is still not touched during the 1 minute, the TV will turn off automatically as a safety precaution.

The TIMER operates only once, but the time and the channel will remain in the unit's memory.

If you want to preset the same channel at the same time for a future date, press TIMER OFF/REPEAT. The TIMER indicator will light up to indicate that the TIMER has been reactivated.

If you want to deactivate the TIMER, press TIMER OFF/REPEAT again so that the TIMER lamp goes out. It is not necessary to summon "TIMER page" to use the TIMER OFF/REPEAT button. Furthermore, this button is effective even if the TV has been turned off.

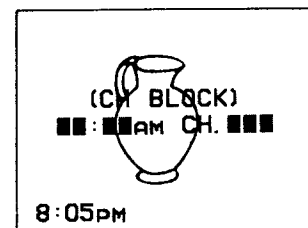
To clear the TIMER setting, summon "TIMER page" and press CLEAR.

To reset, clear the setting and follow the steps on the previous page from step 3.

Make sure that the clock has been set correctly before setting the channel BLOCK.

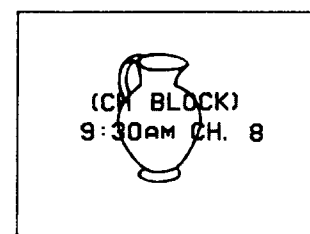
Example: To set the BLOCK for a program which begins at 9:30 AM on channel 8

- 1 Press TIMER/BLOCK three times to change from "normal page" to "BLOCK page."



"BLOCK page"
(indications in red)

- 2 Press 0, 9, 3; 0, ENTER (0 necessary). Numbers will "wink" to indicate that the time has been set.
Press 8, ENTER (0 not necessary). Numbers will "wink" to indicate that the channel has been set.



The BLOCK has now been set.

If you have made a mistake, press CLEAR and return to step 2.

At the preset time, the picture of the selected channel will be blocked from view and the sound will be muted.

A red "BLOCKED" indication will appear on the screen while the channel is blocked.

Normal reception will be resumed after 12 hours.

To return to normal reception while the channel is blocked, recall "BLOCK page" and press CLEAR.

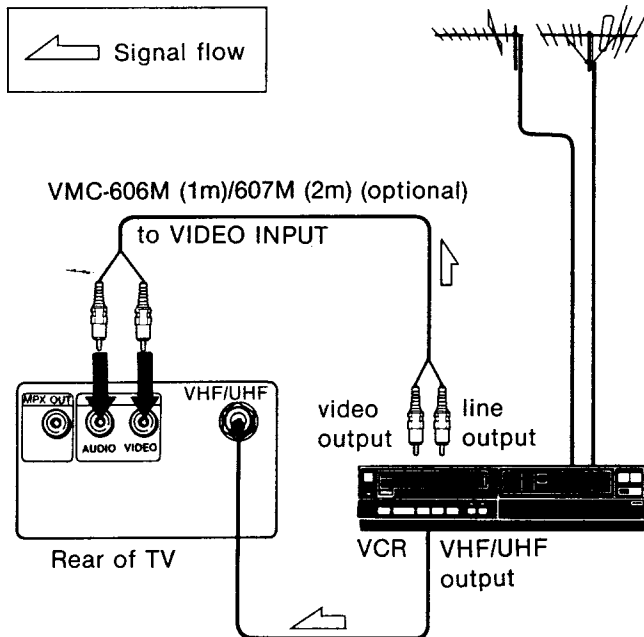
The BLOCK setting blocks a specified channel for the same 12-hour period everyday.

To clear the BLOCK setting, summon "BLOCK page" and press CLEAR.

To reset, clear the setting and follow the steps above from step 2.

VCR PLAYBACK

You can achieve better picture and sound quality by connecting a VCR to your TV using the direct audio and video jacks rather than using an RF connection to the antenna jack. With this connection, you don't have to select channel 3 or 4 to view VCR playback.



Preparations

- 1 Turn on the TV.
- 2 Press the TV/VIDEO button so that the "VIDEO" indication appears on the screen.

For operation, refer to the instruction manual furnished with the VCR.

You can select the desired TV channel even while viewing a VCR playback or listening to the sound fed in through the AUDIO jack.

Notes

- If you have connected a VCR to your TV using only an RF connection and cannot obtain a clear picture and/or sound, the following procedures may solve the problem.
 - 1 Make sure that the TV/VTR (program select) button on the VCR is set to TV.
 - 2 Re-select the desired channel with the buttons on the TV or TV Remote Commander.
- Keep the VCR away from the TV, if the picture or sound is affected.
- When no signal is fed through the VIDEO INPUT jacks even though the TV is in the video mode, "VIDEO" indication will appear on the screen.

MPX OUT JACK USAGE

Caution

Before connecting, make sure that the power to each piece of equipment is turned off.

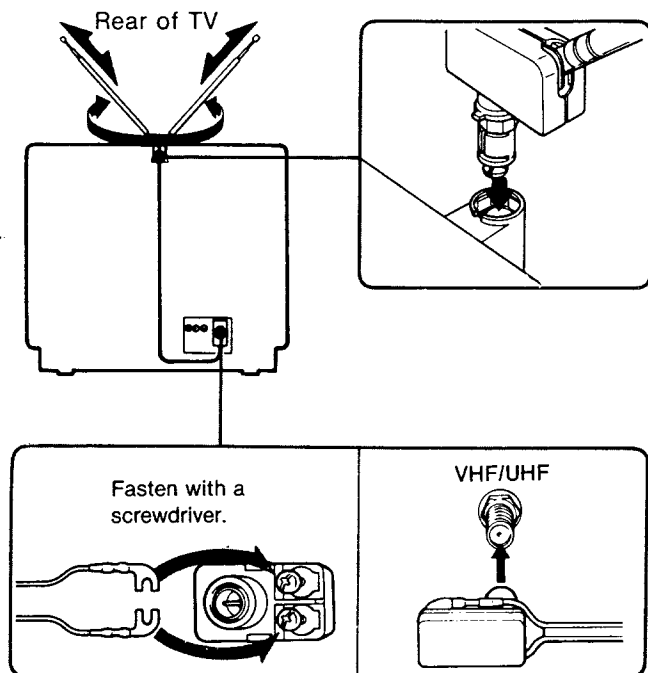
Connect to the MPX OUT jack on the rear of the unit an optional special adaptor for multichannel TV sound (stereo or bilingual) broadcasts.

ANTENNA/CABLE CONNECTION

INDOOR ANTENNA ADJUSTMENT

If your local broadcast signals are strong, use the telescopic dipole antenna.

Adjust the length, direction and angle of both poles symmetrically until the picture is clearest.



OUTDOOR ANTENNA CONNECTION

If you cannot obtain satisfactory reception with the indoor dipole antenna, using an outdoor antenna may be necessary.

Cable TV reception is only possible by connecting a cable supplied by your local cable operator.

- 1 Remove the indoor antenna from the antenna terminal of the TV.
- 2 Prepare the antenna or cable end using the appropriate connector, and connect the antenna or cable to the antenna terminal of the TV. (See **A** or **B** below.)

A Combination VHF/UHF antenna,* VHF antenna, UHF antenna or CATV cable.

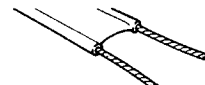
Select the proper connector according to the cable type.

When the cable is a 75-ohm coaxial type (round)

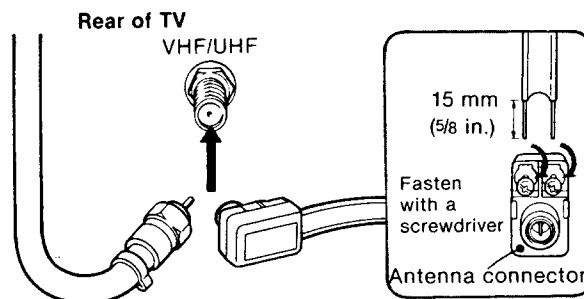


Use an optional F-type connector.

When the cable is a 300-ohm ribbon type lead-in (flat)



Attach the antenna connector which was fixed to the indoor antenna.

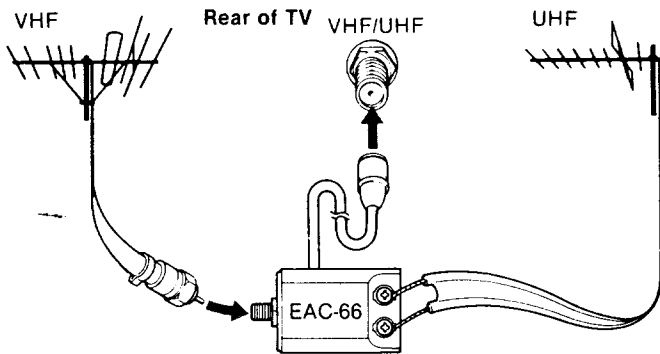


* Most combination antennas are equipped with a signal splitter. Take off the splitter and attach the proper connector.

SPECIFICATIONS

B When both VHF and UHF antennas are connected

Prepare the VHF antenna end using the appropriate connector as illustrated in [A].
Attach an optional EAC-66 U/V mixer to the TV antenna terminal, and connect the cables to the U/V mixer.



Note

When the cable is connected to the TV with the U/V mixer, snow and noise may appear in the pictures of the cable TV channels over 37 (W + 1).

Note to CATV system installer in the U.S.A.

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as possible.

Television system	American TV standards
Channel coverage	VHF: 2-13 UHF: 14-69 Cable TV: 1-125
Picture tube	Microblack Trinitron tube 20-inch picture measured diagonally 21-inch picture tube measured diagonally
Input	Audio phono jack, 408 mVrms (100% modulation), more than 47 k ohms Video phono jack, 1 Vp-p, 75 ohms, unbalanced, sync negative
Output	MPX output phono jack, 77.5 mVrms Load impedance 10 kilohms (main channel, 1 kHz, 100% modulation)
Power requirements	120 V AC, 60 Hz
Power consumption	125 W (max.) 5 W (in standby condition)
Accessories supplied	Remote Commander RM-744 with 2 size AA batteries Telescopic dipole antenna Antenna connector (300 ohm to 75 ohm matching transformer)
Optional accessories	U/V mixer EAC-66 Connecting cord VMC-606M/607M MPX adaptor MLV-1100

Design and specifications subject to change without notice.

TROUBLESHOOTING

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed below.

SYMPTOM		CHECK AND ADJUST
GENERAL	Poor or no picture (screen not lit), good sound	• Adjust PICTURE. • Adjust BRIGHT. • Check antenna/cable connections.
	Good picture, no sound	• Press VOLUME +. • Release MUTING on the Remote Commander.
	No picture (screen not lit), no sound	• Is POWER switched on? Power in outlet? • Check that the TV/VIDEO button is set correctly.
	No color	• Adjust COLOR. • Is it a color program?
	Snow and noise only	• Is it an active or the correct channel? • Check the CABLE selector setting. • Check antenna connections.
	 Dotted lines or stripes	This is often caused by local interference. (e.g. cars, neon signs, hairdryers etc.) Adjust antenna for minimum interference.
	 Double images or ghosts	Reflections from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or CATV cable may improve the picture.
Try another channel. It could be station trouble.		
TIMER/BLOCK	Program start TIMER and/or channel BLOCK does not operate properly.	• Is the clock set correctly? • Is the setting correct? • Have you unplugged the unit? Has a power failure occurred? If so, the settings have been erased.

If the problem persists, contact your nearest service facility.